

Marshall County

Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/27/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 20 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Marshall County economy.¹

These 20 sectors have a total direct output of approximately **\$545.5 million** and support **1,217 jobs** in Marshall County. Running the model for all 20 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Marshall County Economy					
Contribution Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵
Direct Effect	1219.6	17.40%	\$124,017,870	23.39%	\$545,498,636
Indirect Effect	376.8	5.38%	\$27,796,402	5.24%	\$58,426,854
Induced Effect	317.2	4.53%	\$20,388,705	3.85%	\$40,729,613
Total Effect	1913.6	27.31%	\$172,202,977	32.48%	\$644,655,103

As shown in the above table, agriculture, food, and food processing sectors support **1,914 jobs**, or **27.31%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 20 agriculture, food, and food processing sectors is approximately **\$172.2 million**, or **32.48% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the animal, except poultry, slaughtering sector is the top employer with **387 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Marshall County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Animal, except poultry, slaughtering	386.8	\$266,244,802
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	329.8	\$31,624,917
Grain farming	161.9	\$48,814,865
Wholesale trade	104.4	\$18,386,644
Other animal food manufacturing	87.3	\$110,884,996
All other crop farming	82.5	\$5,300,579
Oilseed farming	79.9	\$68,921,303
Truck transportation	67.3	\$9,877,727
Real estate	46.8	\$3,184,740
Monetary authorities and depository credit intermediation	30.0	\$6,533,956

The farm machinery and equipment manufacturing sector directly contributes approximately **\$266.2 million** to the Marshall County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Animal, except poultry, slaughtering	386.8	\$266,244,802
Other animal food manufacturing	87.3	\$110,884,996
Oilseed farming	79.9	\$68,921,303
Grain farming	161.9	\$48,814,865
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	329.8	\$31,624,917
Wholesale trade	104.4	\$18,386,644
Truck transportation	67.3	\$9,877,727
Owner-occupied dwellings	0.0	\$7,416,891
Monetary authorities and depository credit intermediation	30.0	\$6,533,956
All other crop farming	82.5	\$5,300,579

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Marshall County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	79.9	\$68,921,302.80
Grain farming	161.9	\$48,814,865.11
Fruit farming	1.5	\$117,114.31
Tree nut farming	0.0	\$6.65
Greenhouse, nursery, and floriculture production	8.1	\$1,040,439.01
All other crop farming	82.5	\$5,300,578.59
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	329.8	\$31,624,916.08
Dairy cattle and milk production	4.6	\$1,654,622.91
Poultry and egg production	0.6	\$394,426.76
Animal production, except cattle and poultry and eggs	13.3	\$1,339,417.70
Commercial logging	1.5	\$40,308.55
Commercial hunting and trapping	1.5	\$28,899.08
Support activities for agriculture and forestry	17.4	\$3,735,887.29
Other animal food manufacturing	87.3	\$110,884,994.51
Animal, except poultry, slaughtering	386.8	\$266,244,812.01
Bread and bakery product, except frozen, manufacturing	5.8	\$635,407.45
Frozen cakes and other pastries manufacturing	0.3	\$52,079.15
Farm machinery and equipment manufacturing	6.6	\$2,367,640.02
Veterinary services	22.9	\$1,984,924.08
Landscape and horticultural services	7.3	\$316,001.71

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Marshall County, the retail sector was omitted.